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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,300	03/10/2004	Masanori Sato	044499-0204	9116
22428 7590 02/29/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER ANYIKIRE, CHIKAODILI E	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 02/29/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/796,300

Applicant(s)

SATO ET AL.

Examiner

Chikaodili E. Anyikire

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on December 05, 2007 with respect to amended claims 1-9, 11-14, and 16 have been fully considered but they are not persuasive.
2. The applicant argues that Nichani does not teach selecting a plurality of mobile objects in increasing order of a distance from a dangerous source when the mobile objects are in number more than a predetermined value in a monitoring target region. The examiner respectfully disagrees. Nichani discloses using parameters and one being distance and discloses a predetermined number within a certain protection region of the view angle zone region (Fig 10, Col 22 – Col 23 Ln 30).
3. The applicant argues that the Office Action does not teach a process for monitoring only the mobile objects existing in the warning region when the total number of the mobile objects existing in the warning target region is more than a predetermined value (Amendment of December 05, 2007, Pg 7, Ln 18-22). The examiner respectfully disagrees. Lehner et al disclose detecting mobile object in a warning region based on an evaluation unit (paragraph [0050]-[0053]).

A detailed description of the newly amended claims follows.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating

obviousness or nonobviousness.

6. Claims 1-3, 10-11, and 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Nichani et al (US 6,829,371).

As per claim 1, Lehner et al disclose an intruding object monitoring system comprising:

a camera (Fig 2, 5) mounted on a position so as to look down a monitoring target region (Fig 3, 6) including a dangerous source (Fig 2, 1 and 2; [0039]-[0041]); and

an information processing apparatus (evaluation unit) performing information processes for monitoring an intruding object based on a monitoring target region image taken by the camera ([0043] and [0044]),

wherein a mounting position of the camera is determined so that the dangerous source is shown at a peripheral part of a viewing field of the camera ([0041] and [0044]),

wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for monitoring only the mobile objects whose number is a predetermined value and which are selected in increasing order of a distance from the dangerous source when the mobile objects whose number is more than the predetermined value intrude into the monitoring target region (Fig 10, Col 22 – Col 23 Ln 30).

As per claim 2, Lehner et al disclose an intruding object monitoring system comprising:

a camera (Fig 2, 5) mounted on a position so as to look down a monitoring target region (Fig 3, 6) including a dangerous source ([0039]-[0041]); and

an information processing apparatus (evaluation unit) performing information processes for monitoring an intruding object based on a monitoring target region image taken by the camera ([0043] and [0044]),

wherein the dangerous source can be set only at a peripheral part of a viewing field of the camera ([0041] and [0044]),

wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for monitoring only the mobile objects whose number is a predetermined value and which are selected in increasing order of a distance from the dangerous source when the mobile objects

whose number is more than the predetermined value intrude into the monitoring target region (Fig 10, Col 22 – Col 23 Ln 30).

As per **claim 3**, Lehner et al disclose the intruding object monitoring system according to claim 1, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for determining that a mobile object intrudes into a warning region (Fig 3, 7) set in the vicinity of the dangerous source, by comparing a mobile object position in the monitoring target region image to a warning region position (Fig 3, 7) in the monitoring target region (Fig 3, 6) image on an image ([0051]-[0054] and [0081]).

Regarding **claim 11**, arguments analogous to those presented for claim 3 are applicable to claim 11.

Regarding **claim 15**, arguments analogous to those presented for claim 10 are applicable to claim 15.

As per **claim 16**, Nichani disclose the intruding object monitoring system according to claim 5, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for allowing an audible and /or visual output of the warning which was held up when at least one part of the mobile object is lost in sight in the warning region, only after a manual resetting operation has been made (Col 12 Ln 7-34).

7. Claims 4-6, 9, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Nichani et al (US 6,829,371) in further view of Braune (US 2003/0076224).

As per **claim 4**, Lehner et al disclose the intruding object monitoring system according to claim 1, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for immediately generating a warning in a case where a mobile object intrudes into a warning region (Fig 3, 8) existing in the vicinity of the dangerous source ([0044] and [0051]-[0054]).

However, Lehner does not explicitly teach for generating a warning only when speed of the mobile object toward the dangerous source exceeds a predetermined value in a case where the mobile object intrudes into the warning target region existing in the vicinity of the warning region.

In the same field of endeavor, Braune teaches for generating a warning only when speed of the mobile object toward the dangerous source exceeds a predetermined value in a case where the mobile object intrudes into the warning target region existing in the vicinity of the warning region ([0026] and [0036]).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the invention of Lehner et al with the invention of Braune. The advantage is the invention of Braune provides a means by which the safety of a machine operator continues to be ensured.

Regarding **claim 5**, arguments analogous to those presented for claim 4 are applicable to claim 5.

As per **claim 6**, Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information process for monitoring the intruding object performed in the information processing apparatus comprises a process for continuously generating the warning until the mobile object which intruded into the warning region (Fig 3, 8) existing in the vicinity of the dangerous source moves out of the warning region (Fig 3, 8), while for holding up the warning when at least one part of the mobile object is lost in sight in the warning region and has not been determined to have moved out of the warning region (Lehner, Fig 3, 8; [0052] and [0053]).

As per **claim 9**, Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for monitoring only the mobile objects existing in the warning region when the total number of the mobile objects existing in the warning region and the number of the mobile objects existing in the warning target region is more than a predetermined value, wherein the predetermined value is greater than one, and wherein the total number of the mobile objects existing in the warning target region is one or more ([0050]-[0053]).

Regarding **claim 12**, arguments analogous to those presented for claim 6 are applicable to claim 12.

Regarding **claim 14**, arguments analogous to those presented for claim 9 are applicable to claim 14.

8. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Nichani et al (US 6,829,371) in further view of Braune (US 2003/0076224) in further view of Cofer et al (US 7,200,246).

As per **claim 7**, the modified invention of Lehner et al disclose the intruding object monitoring system according to claim 6, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for allowing a reset of the warning which was held up when at least one part of the mobile object is lost in sight in the warning region (Braune, [0018] Ln 12-17).

However, the modified invention of Lehner et al does not explicitly teach only by a manual resetting operation.

In the same field of endeavor, Cofer et al teach only by a manual resetting operation (Fig 14, 564; Col 11 Ln 48-59).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the modified invention of Lehner et al with the invention of Cofer et al. This is a well-known configuration in the relevant art for providing the capability of manual resetting of the system.

9. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehner et al (US 2001/0041077) in view of Nichani et al (US 6,829,371) in further view of Braune (US 2003/0076224) in further view of Puchek et al (US 6,504,470).

As per **claim 8**, the modified invention of Lehner et al disclose the intruding object monitoring system according to claim 4, wherein the information processes for monitoring the intruding object performed in the information processing apparatus comprises a process for immediately generating the warning and then holding up the warning (Lehner, Fig 3, 8; [0052] and [0053]).

However, the modified invention of Lehner et al does not explicitly teach when the mobile objects whose number is more than a predetermined value intrude into the monitoring target region.

In the same field of endeavor, Puchek et al teach when the mobile objects whose number is more than a predetermined value intrude into the monitoring target region (Col 8 Ln 33-56).

Therefore, it would have been obvious for one having skill in the ordinary art at the time of the invention to modify the modified invention of Lehner et al with the invention of Puchek et al. It is well known in the art to keep track of moving objects in a detection system to prevent the access by unauthorized personnel.

Regarding **claim 13**, arguments analogous to those presented for claim 8 are applicable to claim 13.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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CEA

A handwritten signature in black ink is written over a rectangular stamp. The stamp contains the text "PATENT" and "EXAMINER" in a bold, sans-serif font. The signature is a cursive-style name, possibly "J. E. Smith", written in a fluid, connected manner.